

MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY
Environmental Assessment

Water Protection Bureau

Name of Project: City of Columbia Falls Wastewater Treatment Plant

Location of Project: 600 Veteran's Drive, Columbia Falls, Flathead County, MT

City/Town: Columbia Falls **County:** Flathead

Type of Project: POTW MPDES Renewal

Description of Project:

The City of Columbia Falls (Columbia Falls) operates a biological nutrient removal (BNR) wastewater treatment plant (WWTP) with biological and chemical phosphorus treatment and ultraviolet (UV) disinfection and discharges continuously to the Flathead River. The average daily design flow is 0.51 million gallons per day (mgd) and the 2014 total population served was 5,480. The facility includes equalization pumps, a bioreactor, an expanded aeration system, a UV disinfection system, and a standby generator.

The Montana Department of Environmental Quality (DEQ) proposes to renew the applicant's permit, including new effluent limits.

Agency Action and Applicable Regulations:

The proposed action is to renew the MPDES permit for another five-year cycle.

ARM Title 17, Chapter 30, Subchapter 2 – Water Quality Permit Application and Annual Fees.

ARM Title 17, Chapter 30, Subchapter 5 – Mixing Zones in Surface and Ground Water.

ARM Title 17, Chapter 30, Subchapter 6 – Surface Water Quality Standards.

ARM Title 17, Chapter 30, Subchapter 7 – Nondegradation of Water Quality.

ARM Title 17, Chapter 30, Subchapter 12 – MPDES Effluent Limitations and Standards, Standards of Performance, and Treatment Requirements

ARM Title 17, Chapter 30, Subchapter 13 – MPDES Permits

Montana Water Quality Act, MCA 75-5-101 *et. seq.*

Summary of Issues:

Columbia Falls WWTP has upgraded to an A2O BNR system, UV disinfection, and reduced average daily design flow from 0.55 mgd to 0.51 mgd; changes that have all been reviewed and approved as part of facility upgrade plans. Mixing zone has been redefined to smaller dimensions and receiving water quality monitoring is now required.

Affected Environment & Impacts of the Proposed Project:

Y = Impacts may occur.

N = Not present or No Impact will likely occur.

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
1. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE: Are soils present which are fragile, erosive, susceptible to compaction, or unstable? Are there unusual or unstable geologic features? Are there special reclamation considerations?	[N] No impact will likely occur; no change to geology and soils.
2. WATER QUALITY, QUANTITY AND DISTRIBUTION: Are important surface or groundwater resources present? Is there potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality?	[N] No impact will likely occur. Mixing zone size is reduced. Retained and new effluent limitations will protect designated and existing uses of Flathead River.
3. AIR QUALITY: Will pollutants or particulates be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?	[N] Not present.
4. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be significantly impacted? Are any rare plants or cover types present?	[N] No impact will likely occur. No changes to land cover or land use are planned for Columbia Falls WWTP. In Township 030N020W, <i>Castilleja cervina</i> (Deer Indian Paintbrush) is state rank "historical," <i>Pinus albicaulis</i> (Whitebark pine) is state rank "potentially at risk" and USFS ranked "sensitive," <i>Lathyrus bijugatus</i> (Latah Tule Pea) is state rank "potentially at risk/at risk" and USFS ranked "sensitive," <i>Ranunculus pedatifidus</i> (Northern Buttercup) is state rank "potentially at risk," <i>Aloina brevirostris</i> (Aloina moss) is state rank "high risk," <i>Catoscopium nigratum</i> (Black golf club moss) is state rank "high risk," and <i>Grimmia brittoniae</i> (Britton's dry rock moss) is state rank "at risk."

IMPACTS ON THE PHYSICAL ENVIRONMENT

<p>5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds or fish?</p>	<p>[N] No impact will likely occur. Effluent limitations will protect aquatic/wildlife uses.</p> <p>The Montana Department of Fish, Wildlife, and Parks MFISH database describes this segment of the Flathead River as an area with an outstanding fisheries resource value for both habitat and sports classifications. In the area of discharge, the brook trout, mountain whitefish, pygmy whitefish, northern pike minnow, peamouth, slimy sculpin, rainbow trout, redbreast shiner, westslope cutthroat trout, and westslope-rainbow trout cross are residents. Lake trout are common in the area on feeding runs. Bull trout are common, primarily migrating; this segment of the Flathead River is identified as a bull trout node area.</p> <p>The Northwest Power and Planning Council identified this segment of the Flathead River as a Fisheries and Wildlife Protected area. It is considered to be a Class 1 sport fishery with bull trout and westslope cutthroat trout as species of special concern. It is a protected wildlife area because there are bald eagle nesting territories within 2.5 miles of the reach, it is a high density bald eagle winter concentration area, there are high density osprey nesting populations, and important river otter populations are present in high relative densities.</p> <p>In Township 030N020W, <i>Corynorhinus townsendii</i> (Townsend's Big-eared Bat) is state rank "potentially at risk" and USFS and BLM rank "sensitive;" <i>Gluo gluo</i> (Wolverine) is state rank "potentially at risk," USFWS "proposed threat," and USGS and BLM rank "sensitive;" <i>Lasiurus cinereus</i> (Hoary Bat) is state rank "potentially sensitive;" <i>Myotis lucifugus</i> (Little Brown Myotis) is state rank "potentially at risk;" <i>Lynx canadensis</i> (Canada Lynx) is state rank "potentially at risk" and USFWS and USFS "threatened," and BLM "special status;" <i>Pekania pennanti</i> (Fisher) is state rank "potentially at risk;" <i>Sorex hoyi</i> (Pygmy Shrew) is state rank "potentially at risk;" <i>Ursus arctos</i> (Grizzly Bear) is state rank "potentially at risk/at risk" USFWS "threatened," USFS "threatened," and BLM "sensitive;" <i>Ardea Herodias</i> (Great Blue Heron) is state rank "potentially at risk;" <i>Falco peregrinus</i> (Peregrine Falcon) is state rank "potentially at risk," USFS and BLM "sensitive;" <i>Anaxyrus boreas</i> (Western Toad) is state rank "at risk" and USFS and BLM "sensitive;" <i>Oncorhynchus clarkii lewisi</i> (Westslope Cutthroat Trout) is state rank "at risk" and USFS and BLM "sensitive;" <i>Prosopium coulteri</i> Pygmy Whitefish is state rank "potentially at risk;" <i>Salvelinus confluentus</i> (Bull Trout) is state rank "at risk," USFWS and USFS "threatened," and BLM "special status;" <i>Prophyaon humile</i> (Smoky Taildropper) is state rank "at risk/potentially at risk."</p>
<p>6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES: Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Species of special concern?</p>	<p>[N] No impact will likely occur. No changes to land cover or land use are planned for Columbia Falls WWTP. Effluent limitations will protect aquatic/wildlife uses. In Township 030N020W, Threatened and Endangered species are <i>Lynx canadensis</i> (Canada Lynx), <i>Ursus arctos</i> (Grizzly Bear), and <i>Salvelinus confluentus</i> (Bull Trout).</p>

IMPACTS ON THE PHYSICAL ENVIRONMENT	
7. SAGE GROUSE EXECUTIVE ORDER: Is the project proposed in core, general or connectivity sage grouse habitat, as designated by the Sage Grouse Habitat Conservation Program (Program) at: http://dnrc.mt.gov/divisions/cardd/sage-grouse? If yes, did the applicant attach documentation from the Program showing compliance with Executive Order 12-2015 and the Program's recommendations? If so, attach the documentation to the EA and address the Program's recommendations in the permit. If project is in core, general or connectivity habitat and the applicant did not document consultation with the Program, refer the applicant to the Sage Grouse Habitat Conservation Program.	[N] DEQ has verified the facility is not within core, general, or connectivity sage grouse habitat.
8. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?	[N] No impact will likely occur. No known historical or archaeological sites present.
9. AESTHETICS: Is the project on a prominent topographic feature? Will it be visible from populated or scenic areas? Will there be excessive noise or light?	[N] No impact will likely occur.
10. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY: Will the project use resources that are limited in the area? Are there other activities nearby that will affect the project? Will new or upgraded powerline or other energy source be needed)	[N] No impact will likely occur. No increased energy needs are currently planned. A removal of 25 nearby septic systems in integration of homes to sewer system is planned for 2017.
11. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES: Are there other activities nearby that will affect the project?	[N] Not present.

IMPACTS ON THE HUMAN ENVIRONMENT	
RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
12. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?	[N] No impact will likely occur.
13. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?	[N] No impact will likely occur.
14. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.	[N] No impact will likely occur.
15. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?	[N] No impact will likely occur.
16. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc.) be needed?	[N] Short-term construction traffic increase may occur during facility upgrades or sewer system expansion. No facility upgrades are currently planned, but properties associated with 25 septic systems in nearby Riverwood Subdivision will be connected to the City sewer system in 2017.

IMPACTS ON THE HUMAN ENVIRONMENT	
RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
17. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	[N] No impact will likely occur. No zoning changes are likely to be required in the immediate area of the WWTP.
18. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES: Are wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract?	[N] Not present at the WWTP. Recreation may occur on the Flathead River. Water quality monitoring and permit conditions are protective of recreation on the Flathead River.
19. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?	[N] No impact will likely occur.
20. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?	[N] No impact will likely occur.
21. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?	[N] No impact will likely occur.
22. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:	[N] Not present.
23(a). PRIVATE PROPERTY IMPACTS: Are we regulating the use of private property under a regulatory statute adopted pursuant to the police power of the state? (Property management, grants of financial assistance, and the exercise of the power of eminent domain are not within this category.) If not, no further analysis is required.	[N] Not present.
23(b). PRIVATE PROPERTY IMPACTS: Is the agency proposing to deny the application or condition the approval in a way that restricts the use of the regulated person's private property? If not, no further analysis is required.	[N] Not present.
23(c). PRIVATE PROPERTY IMPACTS: If the answer to 21(b) is affirmative, does the agency have legal discretion to impose or not impose the proposed restriction or discretion as to how the restriction will be imposed? If not, no further analysis is required. If so, the agency must determine if there are alternatives that would reduce, minimize or eliminate the restriction on the use of private property, and analyze such alternatives. The agency must disclose the potential costs of identified restrictions.	[N] Not present.

24. Description of and Impacts of other Alternatives Considered:

MPDES renewal permit issuance is not predicted to have any additional impacts. Permit denial would cause extreme hardship on the municipality and render it unable to continue sewer service to resident and businesses.

25. Summary of Magnitude and Significance of Potential Impacts:

None.

26. Cumulative Effects:

None.

27. Preferred Action Alternative and Rationale:

The preferred action is to reissue the MPDES permit. This action is preferred because the permit program provides the regulatory mechanism for protecting water quality by enforcing the terms of the MPDES permit.

Recommendation for Further Environmental Analysis:

EIS More Detailed EA No Further Analysis

Rationale for Recommendation: An EIS is not required under the Montana Environmental Policy Act (MEPA) because the project lacks significant adverse effects to the human and physical environment.

28. Public Involvement:

A 30-day public comment period will be held.

29. Persons and agencies consulted in the preparation of this analysis:

Grady Jenkins, Chief Operator Columbia Falls WWTP; Rickey Schultz, PE HDR Engineering, Inc.; DEQ Engineering Bureau

EA Prepared By:

Emilie Erich Hoffman, March 08, 2017

Approved By:

Jon Kenning, Chief
Water Protection Bureau

Date